



# **ANNUAL IMPLEMENTATION REPORT**

**for**

**GDOT RESEARCH ADVISORY COMMITTEE**

**OFFICE OF RESEARCH**

**AUGUST 22, 2013**



## INTRODUCTION

This report is the second Annual Implementation Report presented to the Research Advisory Committee (RAC) of the Georgia Department of Transportation (GDOT), which convenes each year. The report summarizes implementation activities for two primary sets of research conducted under the GDOT Research and Development (R&D) program by the Office of Research (OR): (1) contract research completed since the last RAC meeting that has either been implemented or is pending implementation; and (2) examples of ongoing implementation under the Transportation Pooled Fund (TPF) program. Contract research is normally funded with 80% federal/20% state, State Planning and Research (SP&R) dollars, while TPF projects are funded with 100% federal SP&R dollars.

All research activities are intended to solve a particular problem or provide useful information. R&D projects contain work elements to ensure that GDOT implements research findings and new technologies. Consequently, each research project that is approved for conduct is approved with implementation of its findings as the project goal and within the official project objectives (*GDOT Research and Development Manual, 2012*).

The project implementation summaries are organized according to the Research Technical Advisory Group (RTAG) that its subject is most pertinent to (Asset Management, Mobility, Policy/Workforce, or Safety).

The projects discussed below demonstrate that both federal and state research dollars are being well leveraged to conduct and implement research with tangible benefits to GDOT and the traveling public. This research is in direct alignment with GDOT strategic goals, and the implementation products provide enhancements to a cross-section of major divisions within GDOT (e.g. Planning, Engineering, Construction, and Operations). This in turn supports GDOT's overall mission to provide "a safe, connected and environmentally sensitive transportation system that enhances Georgia's economic competitiveness by working efficiently and communicating effectively to create strong partnerships."

## HIGHLIGHTED IMPLEMENTATION ACTIVITIES

### ASSET MANAGEMENT

#### ***RP 08-05: Bridge Repair and Strengthening Study, Part 1 (T/I Manager: Clayton Bennett, Office of Bridge Design (OBD)) & NCHRP Project 10-73 (NCHRP Report 655)***

Almost two-thirds of the state-owned bridges in Georgia were built prior to 1973. The majority of these bridges are supported on reinforced concrete pier caps designed and constructed in accordance with specifications and practices prevalent prior to 1973. GDOT inspects, evaluates bridge deficiencies, and determines load ratings for all public road bridges. This bridge condition assessment program is routinely followed for compliance with regulations of the National Bridge Inspection Standards (NBIS).



Many of the reinforced concrete pier caps in bridges constructed in the decades following World War II were designed using levels of shear reinforcement considered inadequate in modern bridge engineering practice. Such bridges carry traffic loads that are in excess of their original design loads, and their capacity in shear is of particular concern. Posting of these bridges disrupts the free flow of goods within the region served by the bridge and has a negative economic impact on the community served by the bridge.

GDOT sponsored a research project to examine the response of structurally-deficient reinforced concrete bridge pier caps rehabilitated with three innovative strengthening schemes that included externally bonded carbon fiber polymer composites, externally bonded stainless steel plated systems, and an external clamping system with post-tensioned rods. The research provided GDOT with alternative methods for in-place strengthening, repair, and upgrade of deficient bridge pier cap structures. This work was also furthered through a NCHRP research project performed by the same researcher that developed design, construction and material specifications for carbon fiber polymer composites for the repair and strengthening of bridges. The AASHTO LRFD Bridge Design Specifications now has a Guide on the use of carbon fiber reinforcing and the AASHTO Materials Specifications has a Provisional Standard on Fiber-reinforced polymer composite materials (MP-22), which are both a direct result of this research.

***RP 11-19: Comprehensive Evaluation of the Long-Term Performance of Rubberized Pavements: Phase I (T/I Manager: Sheila Hines, Office of Materials and Testing (OMAT))***

In this project, GDOT evaluated the performance of select rubberized asphalt (RA) mixes that have been in use over the past five years. The project examined the performance of rubberized (1) stone matrix asphalt (SMA), a coarse mix used to reduce deformation from heavy loads; and (2) open-graded friction course (OGFC), a mix type which improves tire grip and pavement surface drainage. This was GDOT's first contract research project with Georgia Southern University.

GDOT evaluated RA in the 1990's but tabled its use until 2007 due to cost and performance issues. Lower RA costs, other states' success with RA, plus heightened public interest in recycling all encouraged GDOT to place over 200,000 tons of RA since 2007. This research was important for moving forward with rubberized SMA and rubberized pervious friction mixes.

Laboratory investigations of the performance of in-place OGFC and SMA rubberized asphalt mixes were conducted, and these mixes were compared to a polymer-modified asphalt (PMA) mix as a control. Work conducted in this stage was critical in determining whether rubberized OGFC and SMA can perform as well as polymer-modified OGFC and SMA. Also, Phase II is currently being conducted to track the field pavement performance. Due to the Phase 1 results Specification Sections 400 and 820 in the 2013 Edition of the Specification Book now allow RA.

***RP 11-27: Development of a Risk-Based Scorecard to Assess Scour Vulnerability of Georgia's Bridges (T/I Manager: Andy Doyle, OBD)***

FHWA developed a risk-assessment tool called HYRISK to help determine which bridges are most vulnerable to scour. HYRISK can be used to calculate and rank the probability of bridge failures due to scour, including those with unknown foundations. Currently, GDOT does not have a way to rank these structures according to risk.

In this research, which was funded through the University Transportation Center program (joint USDOT/GDOT match), the HYRISK model was customized for GDOT and a "scorecard" of bridge vulnerabilities was developed. This scorecard includes an extensive economic loss model due to bridge failures that accounts for time lost by individuals and shippers due to detouring around a bridge closure; rebuilding costs that are linked to construction times; the cost of lives lost due to a bridge collapse; and other factors. Because Georgia has a large body of bridges with unknown foundations, this scorecard will be used primarily for these types of structures. This scorecard gives GDOT a way to divide this group of bridges into smaller groups.



An action plan based on these smaller populations has been developed. GDOT is moving forward with the scorecard developed from this project by incorporating the use of the HYRISK model to identify a subset of bridges for which it will perform initial scour screenings and/or detailed scour evaluations. The ranking of bridges will consider both the probability of failure as well as expected economic losses.

***RP 11-35: A Pavement Condition Survey Procedure and Program for Georgia's Counties and Cities (T/I Managers: Eric Pitts, Office of Maintenance (OM); Georgene Geary, Office of Research)***

GDOT has conducted annual pavement condition evaluations on state routes since 1997 using the Computerized Pavement Condition Evaluation System (COPACES), which was developed to support GDOT's pavement maintenance and rehabilitation decisions. There is no standard procedure or tool available, however, to counties and cities for effectively monitoring and managing the non-state maintained route system. GDOT sponsored this project to promote local agencies' capabilities to effectively conduct pavement asset management by transferring its knowledge and practices on pavement performance monitoring, preservation, and management to these agencies. The objective of this project was to develop a COPACES for Counties and Cities (COPACES-CC) by streamlining the successfully implemented COPACES to accommodate local agencies' needs.

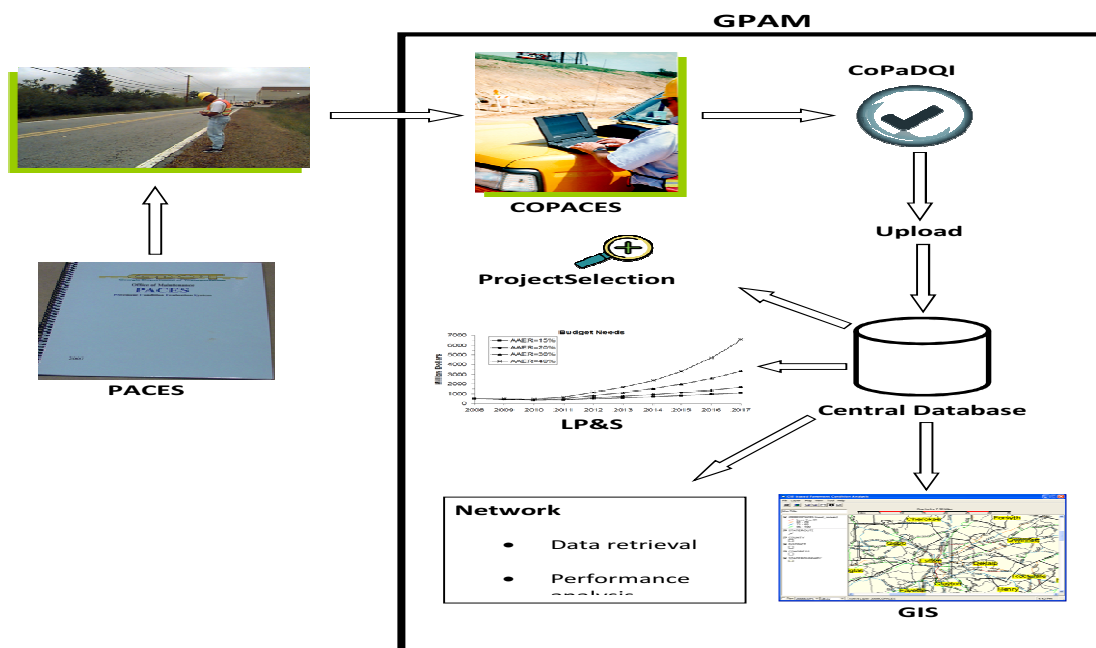
This system includes a different location referencing system and unique business operations. COPACES-CC provides functions for data collection, analysis, reporting, and

management. It also provides user manuals and an advanced computer program. Finally, a statewide implementation strategy that leverages existing GDOT annual COPACES training has been developed, and future enhancements based on user feedback are proposed. The following comments reflect the first version training and testing results of the program by Newton County, Dougherty County, and the City of Moultrie:

Dougherty County: "I think the program is a great tool for the many cities and counties that do not have an evaluation, record-keeping system for their roads."

Newton County: "If you are a county or city with no system at all, this program is very helpful and a good cost effective opportunity for roads management."

The second version of this program was also tested by Newton County and the City of Moultrie. Newton County used the program to collect data on some actual pavements, and its chief engineer commented, "Overall, I think this is very user-friendly, and it will allow a county/city to build data that is useful for analysis and program management of asphalt maintenance." GDOT also received a request from the University of Kentucky for information "about tools available for local governments to inventory, assess condition, and monitor performance of highway assets, namely pavements...a tool that local governments could use to conduct basic asset management."



**Note:** This project was nominated for an AASHTO "High Value Research Award" from the AASHTO- Research Advisory Committee.

### Roadside Enhancement Research

GDOT Office of Maintenance (OM) is providing technical/implementation management of four active research projects related to roadside enhancement. Since it is not felt practical nor cost-



effective to mow the entire width of roadsides, these projects deal with management of (1) the clear zone/turf area which must be mowed and kept free of fixed objects; and (2) the area beyond the clear zone which includes non-mowable areas and stream buffers. These two zones are very different and each requires different management approaches. It is expected that the research will help produce integrated management of the roadsides in an efficient and cost-effective manner.

*RP 12-09: Enhancing Education and Recommendations for Vegetation Management Programs for GDOT (T/I Manager: Ray Dorsey, OM)*

The focus of this project is on weed ecology and learning how to time chemical treatments for efficient use of expensive herbicides. A smart phone application can provide quick access to references and identify weeds correctly. This application is pending implementation in August-September 2013, beginning with Roadside Enhancement staff and ultimately including Maintenance Foremen and Herbicide Operator/Applicators. The phone app concept and capabilities have been presented at Maintenance Foreman's Academy meetings.



*RP 12-37: Enhancing Vegetation Management Programs for GDOT (T/I Manager: Ray Dorsey, OM)*

The goal of this project is to identify (1) effective residual herbicides for control in pavement and transitional areas to reduce time, cost, and labor; and (2) potential new grass species that require less mowing. Educational training sessions on findings to-date have been provided at Maintenance Foreman's Academy meetings: Per current test trials, one herbicide in particular is showing great results for pavement vegetation control, and based on the findings, has been incorporated into GDOT's pavement vegetation management program. OM expects to incorporate other chemistry into the program once the research is completed.

*RP 13-08: Enhancing Extension Recommendations to Maximize Efficacy of Spray Programs for the Georgia DOT (T/I Manager: Ray Dorsey, OM)*

This project is examining (1) additives for helping herbicides stick to weeds; (2) water quality, effects of hard water and other water purifying chemicals on herbicide efficacy; (3) application equipment-what works best based on target; and (4) determining drift potential based on wind, humidity, temperature, etc. Educational training sessions on findings to-date have been provided at Maintenance Foreman's Academy meetings. Water quality, especially hard and soft water, varies in many of the samples taken to-date. When hard water is used as a carrier for herbicide applications, the hard water can be an inhibitor to the active ingredient thus effecting the control of certain weeds and/or grasses. Accordingly, GDOT will likely use a water softening agent for areas of the state that have hard water so as to maximize herbicide efficacy.

*RP 12-14: Developing Extension Recommendations for Establishing Native Species on Georgia Roadsides (T/I Manager: Davie Biagi, OM)*



GDOT is required to implement ways to provide mitigation for road construction impacts to stream and other state water buffers based on new laws and EPD requirements. The goal of this project is to provide ways to mitigate with vegetation that are cost effective and practical. Researchers are studying vegetative mitigation that will be self-sustaining and fit naturally into the unmanaged woods beyond the clear zone.

The study scope includes 29 species in five different regions of the state, planted at different times of the year, and monitored over a typical two-year construction period of time. Each species' ability to provide erosion control and soil stability will be rated, using no fertilizer and no lime and no special watering. It is expected that study findings will provide confirmation of what works to encourage designers, seed-suppliers and contractors to utilize proven native species. This project has concluded its first year, and GDOT is already utilizing the findings for mitigation projects. Five species have already performed well at all five test sites, and tests have also shown better success for spring planting dates than for fall.

***TPF 5(141): Pavement Surface Properties Consortium: A Research Program (T/I Manager: Monzy Mathews, OMAT)***

GDOT has been participating in this regional TPF study, which is a program focused on the optimization of pavement surface texture characteristics. The program was established in 2006 with support from FHWA and six state DOT's: Connecticut, Georgia, Mississippi, Pennsylvania, South Carolina, and Virginia. The Consortium provides a practical mechanism to conduct research about pavement surface properties and explore their relationships with ride quality, friction, and noise.

Various friction testers and profilers were assessed during the equipment roundup "rodeo." The objective of the rodeo was to harmonize the participant friction tester's and profiler's measurements. Both the skid tester and the profilers are used by GDOT all year long. By participating at these rodeos, GDOT was able to learn how its equipment correlates with other DOT's with similar equipment.

A few other implementable findings from the study are given below:

1. The equipment comparisons should be performed on periodic basis to harmonize various equipment measurements and as a diagnostic method to identify any possible anomalies with the data collection system.
2. The single-spot laser profilers over-predicted the IRI values (compared with the reference values) on the ground and grooved PCC due to grooves on the section; the single-spot profilers are incapable of measuring the correct profile. Since GDOT has spot laser profilers, GDOT will be looking in to procuring wider foot print laser profilers (during the upgrade).

Also, to provide a profiler certification site, it is necessary to make all the reference measurements of the test sections using an accurate and approved reference measurement system (e.g., SURPRO). For this reason, the Consortium acquired the SURPRO equipment to perform the reference measurements at the Smart Road events. GDOT also procured a SURPRO in 2013 and is to utilize this equipment to certify GDOT's test sites. In late 2013, GDOT will be able to calibrate its own profilers with greater level of confidence. It also allows increasing the frequency of validations of the profilers, if required.

***TPF5(245): 2012 Multi-State Asset Management Implementation Workshop (T/I Manager: Melany Reynolds, Office of Organizational Performance Management (OOPM))***

GDOT participated in the Multi-State Asset Management Implementation Workshop conducted by the National Highway Institute. On September 26-27, 2012, OOPM and several other GDOT business units (OBD, Office of Audits, and Office of Intermodal, et al.) participated in the introductory course that covered the principles of asset management (AM) and introduced the five core questions every agency should be able to answer about its assets. The course also illustrated available tools to support the use of AM within the agency and provided guidelines for the implementation of these principles.

Participants came away with a better understanding of the basic principles of AM and were able to apply AM principles to realistic situations. An added benefit was that the participants were able to explain the use of the implementation guidelines to their specific business units. By participating in this implementation workshop, employees are able to enhance GDOT's application of AM principles and concepts and further facilitate development of the Transportation Asset Management initiative within various GDOT offices.

## **MOBILITY**

***Accelerating Environmental Review***

In keeping with the GDOT strategic goal of "planning and constructing the best mobility-focused projects [it] can, on schedule," the Office of Environmental Services (OES) continues to leverage GDOT's R&D program to accelerate environmental review. Through development of archaeological, historical, and ecological contexts, which are diagnostic documents that enable users to evaluate resources for special consideration (e.g. National Register eligibility) review time can be reduced and project delays related to discovery of these resources avoided. One project below was reported last year, but an update on its ongoing implementation is provided.

***RP 10-02: Historic Streetcar Systems of Georgia Context Study (T/I Manager: Sharman Southall, OES)***

The Historic Streetcar Systems of Georgia Context Study has proven a useful tool to OES in identifying, interpreting, and assessing the significance of resources associated with the 19<sup>th</sup>-20<sup>th</sup> century Atlanta streetcar system. The context is available as a free download on the GDOT website, and a geodatabase is available for use both internally and externally so that planners, designers, and preservationists alike can readily identify and consider potential effects of projects on streetcar resources, such as tracks, car barns, or landscape features. The GIS group



from GDOT IT Division has added it to the standard datasets available in ArcGIS, and anyone working in that program can quickly add these data as a layer. The goal is that both designers and environmental specialists can quickly assess the presence and potential impacts to streetcar resources when going through the transportation planning process.

**Update:** OES continued to work with the company that developed the context and the geodatabase to create a website that makes the information available to the public as a collection of case studies to aid preservation professionals in the evaluation of historic significance was also added. In April 2013, a training session was held for OES staff, and the website was launched (<http://georgiastreetcars.org/>). Concurrent with this launch, the product was presented to the preservation community at the Statewide Preservation Conference held in Milledgeville in April 2013. Since that time, OES has begun to develop a Programmatic Agreement (PA) between GDOT, FHWA, and the State Preservation Office to treat streetcar-related resources in a standardized manner. This effort will streamline the environmental process and eliminate the suspension of construction activities when these archaeological resources are discovered. The PA is expected to be executed by summer 2014.

***RP 11-20, On-Line Training Ranch House Guidelines (T/I Manager: Madeline White, OES)***

The creation for the web-based Ranch House training was a result of the need to provide our cultural resource consultants a training opportunity that focuses on mid-twentieth century architecture. Cultural resource consultants who do historic resource surveys are required to have this training in order to be prequalified to work for GDOT. The problem was that the current training opportunity does not adequately address the issues and concerns GDOT encounters with mid-twentieth century architecture. The web-based Ranch House training will replace the current class requirement. GDOT had recently partnered with the Georgia Transmission Commission and the Georgia Historic Preservation Office to develop a context study on Ranch Houses. This context study was the basis for the web-based training.

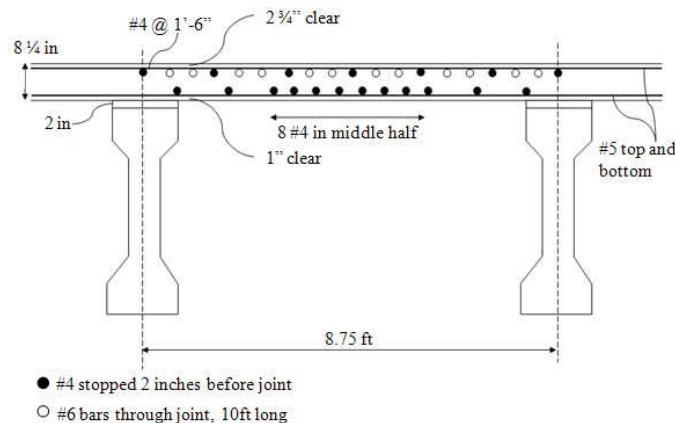
The web-based training will be offered through GDOT's Electronic Learning Management System (ELMS). Participants will not receive a grade upon completion of the training but rather confirmation of completion of the training. The training was designed to reinforce not only the context study on Ranch Houses, but also re-enforce the process for evaluations of National Register eligibility through a case study and examples of Ranch Houses with varying degrees of integrity.



***RP 10-29: "Evaluation of Performance and Maximum Length of Continuous Decks in Bridges, Part 2"***

This research was done to verify that the expansion joint treatment being used by OBD was functioning as intended. The research verified that most of the joints are satisfactory and functioning as intended. OBD bridge joint details were also reviewed and are satisfactory. For example, GDOT currently uses 400 feet as the limits of deck continuity, which matches the

limits recommended by the report. Other recommendations from the report have been adopted for the most part, with the exception of the rebar recommendation. GDOT will likely continue to use its current rebar detail, since results have been satisfactory to date. The GDOT Division of Engineering, considers the research “to be meaningful and...verified what we originally set out to study.”



***TPF 5(002): Updating A Guide to Standardized Highway Lighting Pole Hardware (Contact: Paul Liles, Division of Engineering)***

This project developed an updated, fully-digital, searchable, online Standardized Guide to Lighting Pole Hardware. The *Guide* is a web-based content management system for luminaire support systems that allows full viewing, submission, management, and reporting services to its users (e.g., state DOT personnel, construction contractors, et al.). The *Guide* is one of six online guides maintained by the AASHTO-AGC-ARTBA Joint Committee on New Highway Materials Task Force 13. The homepage for the *Online Guides* can be found online at <http://guides.roadsafellc.com/>. GDOT-OB uses this guide primarily as a reference. OB reviews some lighting poles for structural suitability as requested by the GDOT Office of Design Policy and Support. The *Standardized Guide to Lighting Pole Hardware* is primarily used as a reference for this purpose.

***TPF 5(029): High Occupancy Vehicle (HOV)/Managed Use Lane (T/I Manager: Andrew Heath, Office of Planning)***



GDOT continues to participate in the High Occupancy Vehicle (HOV)/Managed Use Lane (MUL) study, and the findings to-date have been valuable. In the past year, the study provided funding for an examination, synthesis, and development of guidelines for implementation of Dynamic Shoulder Use on freeways. This study was particularly relevant to GDOT with the recent implementation of flex shoulders on State Route 400 and the current

ongoing Atlanta Freeway Operations Study. The findings of the Dynamic Shoulder Use study, through the TPF study, were provided to the GDOT team working on the Atlanta Freeway Operations Study for their use.

Also, GDOT hosted the 2012 annual meeting of the TPF study in Atlanta, in coordination with Georgia Regional Transportation Authority and State Road and Tollway Authority. In this meeting, GDOT provided a guided tour of the operational I-85 Express Lanes, and multiple sessions were conducted in which GDOT employees were able to directly interact with members of the TPF study from other states. These sessions provided valuable feedback to both the Offices of Planning and Traffic Operations for use in their respective duties.

***TPF 5(039): Falling Weight Deflectometer (FWD) Calibration Center and Operational Improvements (T/I Manager: Tanisha Georges, Office of Materials and Testing (OMAT))***

This study was initiated to (1) update the SHRP/LTPP Falling Weight Deflectometer (FWD) calibration equipment, software, and protocol; and (2) develop and implement long-term plans for FWD calibration centers. The primary goal of this study was to upgrade the existing FWD calibration system to make calibration sustainable for the next decade without a loss of quality, while ensuring that any new procedures are compatible with all brands of FWD's sold in the U.S. This involved upgrading the hardware and software used in calibration to take advantage of improvements in technology. The study outlined the updated procedures and provided details on the equipment and methods needed to perform the updated protocol.

GDOT Office of Materials and Testing (OMAT) currently uses a SHRP/LTPP FWD Calibration center located in Texas. The Texas calibration center has updated the calibration equipment, changed calibration techniques, and installed new software. The center also trained and certified more technicians for the new calibration process. All of this was done to create more efficient, streamlined, and precise calibrations. OMAT has benefited from this study in a number of ways, including an increase in the precision of calibration because of the updated equipment and the updated software and protocols that were developed and implemented. Also, calibration time has been reduced, due to the changes implemented during the course of this study, as well as an increase in qualified, trained technicians.

## **POLICY/WORKFORCE**

### ***Innovative Project Delivery Research***

Also in keeping with the strategic goal of timely delivery of mobility-related projects (see page 9), GDOT continues to support research on innovative project delivery. Two cutting-edge research projects on this topic were completed recently, focusing on (1) project selection aspects of Design-Build (DB) projects; and (2) how innovative project delivery methods are capable of enhancing efficiency at the project level *and* at the Department level. The first project produced a guidebook to improve the efficiency of DB contracting, while the second developed a set of best practices to enhance the efficiency of the DB program at the organizational level, as discussed in more detail below.

***RP 10-23: Recommended Guide for Next Generation of Transportation Design-Build Procurement and Contracting in the State of Georgia (T/I Manager: Darryl VanMeter, Office of Innovative Program Delivery (OIPD))***

GDOT, in partnership with academia, developed a DB guidebook to improve the efficiency of DB contracting in highway construction. A DB selection tool based on the guidebook was also developed to evaluate the appropriateness of DB for transportation projects. This tool helps GDOT in (1) determining suitability of DB for projects; (2) assessing whether project risks can be managed if DB is selected for a project; (3) evaluating authorized procurement methods and selecting the most appropriate method; and (4) transparent and consistent DB implementation.

A post-research workshop was held to facilitate adoption of DB contracting in Georgia. The workshop participants were guided through various steps of this systematic approach as described in the DB selection tool. At the end of this workshop, a survey was conducted to receive the participants' feedback on ways to enhance the DB selection tool. Effective July 1, 2012, Georgia legislators raised the cap for DB by 50% (in dollars), based on the total amount of construction projects awarded in the previous fiscal year. Additionally, effective July 1, 2013, Georgia legislators revised the DB code to allow for Best Value DB contracting. These changes were made possible, in part, by solid DB project suitability assessments that this research enhanced for future use.



***This project received an AASHTO “High Value Research Award” from AASHTO’s Research Advisory Committee.*** This award will be presented to the commissioner at the Annual AASHTO Fall meeting.

***RP 11-21: How Can Innovative Project Delivery Systems Improve the Overall Efficiency of GDOT in Transportation Project Delivery? (T/I Manager: Darryl VanMeter, OIPD)***

As a follow-on to RP 10-23 above, this research project identified and evaluated several industry best practices for DB project delivery pertaining to the following: project delivery selection, procurement, environmental planning and permitting, right-of-way (ROW) acquisition, utility coordination and relocation, alternative technical concepts (ATC), design oversight, design acceptance, and quality control/quality assurance. From these best practices, the OIPD implementation scope includes the following:

- Continue using, maintaining, and updating the standard DB selection tool that systematically evaluates the appropriateness of DB for transportation projects
- Use consensus evaluation instead of individual evaluations, and pass/fail and adjectival scoring instead of point scoring, for the assessment of DB proposals
- Add flexibility to the NEPA document and special studies by identifying alternative mitigation strategies, maximum impacts, and performance mitigation measures
- Consider allowing the DB team to accept the risk of NEPA re-evaluations (schedule and cost risks) by requiring the team to complete the re-evaluation or to provide required documentation for it
- Coordinate project ROW needs with utilities, environmental mitigation requirements, tolling infrastructure, and other project needs that may affect ROW
- Identify project goals and select a ROW acquisition strategy that helps achieve them

- Ensure that contract language is clear to DB teams on their required role in utility coordination and relocations
- Consider ATC's as an educational tool to engage state DOT engineers in the DB process
- Facilitate the required cultural shift regarding design oversight and design acceptance of DB projects and provide opportunities for state DOT engineers to think of DB projects as learning experiences
- Take advantage of informal or over-the-shoulder design review while requiring DB teams to submit milestone design developments for formal review

## SAFETY

### ***TPF 5(252): I-95 Corridor Coalition Vehicle Probe Project (T/I Manager: Mark Demidovich, Office of Traffic Operations (OTO))***

The I-95 Corridor Coalition began an initiative in 2008 called the Vehicle Probe Project with the ambition of providing comprehensive and continuous travel time information on freeways and arterials from Maine to Florida using non-intrusive technologies based on vehicle probe methods. A collaborative effort among the I-95 Corridor Coalition members, the vehicle probe project envisioned a system that provided travel time and speed data for corridors that facilitates interstate as well as intra-state movement. The objective of this current second phase of the project is to continue to push forward to realize the entire vision of the Vehicle Probe Project, that of an ubiquitous and high quality source of travel time and speed data creating a seamless traffic monitoring system that spans the entire eastern seaboard using probe technology, and driving a variety of applications. The applications include not only Operations, but also Planning and Engineering, and not only existing applications, but also uses of the data not previously leveraged.

With participation in this study, OTO is getting real-time traffic data for several highways in the state including all of I-95, all of I-985 and portions of I-16, I-20, I-85 and I-520. These data are used by GDOT operators for real-time traffic monitoring and incident management within the Navigator system at the Transportation Management Center (TMC). OTO is also publishing these data to the public via the Navigator 511 website, apps and telephone system.

